



Monprene® IN-22940D

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene IN-22940D is a high performance thermoplastic elastomer, available in BLK or NAT, designed for industrial applications. Monprene IN-22940D is a high hardness, low density, UV stabilized grade that is suitable for both injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Good Adhesion • Good Colorability • Good Processability • Good Toughness	• Good Weather Resistance • High Hardness • Light Stabilized • Low Density • Low Flow	• Low Specific Gravity • Resilient • UV Resistant • Without Fillers
Uses	• Consumer Applications • Gaskets • Industrial Applications	• Knobs • Plugs • Profiles	• Rubber Replacement
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Natural Color	
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.900	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	3.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	1100	psi	
Flow : 100% Strain	1520	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	1190	psi	
Flow : 300% Strain	1650	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	2230	psi	
Flow : Break ³	2410	psi	
Flow : Break	1820	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	830	%	
Flow : Break ³	690	%	
Flow : Break	460	%	
Tear Strength ²			ASTM D624
Across Flow	512	lbf/in	
Flow	589	lbf/in	
Compression Set ⁴			ASTM D395B
73°F, 22 hr	32	%	
158°F, 22 hr	89	%	

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Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore D, 1 sec, Injection Molded	42		
Shore D, 5 sec, Injection Molded	40		
Fill Analysis	Nominal Value	Unit	Test Method
Apparent Viscosity (392°F, 206 sec [^] -1)	360	Pa·s	ASTM D3835

Processing Information		
Injection	Nominal Value	Unit
Rear Temperature	420 to 460	°F
Middle Temperature	420 to 460	°F
Front Temperature	420 to 460	°F
Nozzle Temperature	420 to 460	°F
Processing (Melt) Temp	420 to 460	°F
Mold Temperature	60 to 90	°F
Injection Pressure	200 to 1000	psi
Injection Rate	Moderate-Fast	
Back Pressure	25.0 to 50.0	psi
Screw Speed	50 to 100	rpm
Cushion	0.150 to 1.00	in
Injection Notes		
Drying is not necessary. However, if moisture is a problem, dry the pellets for 2 to 4 hours at 150°F (65°C).		
Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	400 to 440	°F
Cylinder Zone 2 Temp.	400 to 440	°F
Cylinder Zone 3 Temp.	400 to 440	°F
Cylinder Zone 4 Temp.	400 to 440	°F
Cylinder Zone 5 Temp.	400 to 440	°F
Die Temperature	400 to 440	°F
Extrusion Notes		
Screw Speed: 30 to 100 rpm		

Notes

- ¹ Typical properties: these are not to be construed as specifications.

² Die C, 20 in/min

³ Extruded tape

⁴ Type 1